

HEALTH POLICY RESEARCH SERIES
Discussion Paper #94-1



**MANAGED MEDICAID COST SAVINGS:
THE ARIZONA EXPERIENCE**

Nelda McCall, Laguna Research Associates
C. William Wrightson, Actuarial Research Corporation
Lynn Paringer, Laguna Research Associates
Gordon Trapnell, Actuarial Research Corporation

January 1994

REPORTS

RA
412
.45
A6
M3
1994



LAGUNA RESEARCH ASSOCIATES

455 MARKET ST., SUITE 1190, SAN FRANCISCO, CA 94105 • 415-512-7480

ACKNOWLEDGEMENTS

This paper is based on work funded under Contract Numbers HCFA-500-83-0027 and HCFA-500-89-0067. The analysis and conclusions contained herein are solely those of the authors and do not express any official opinion of or endorsement by the Health Care Financing Administration.

The authors would like to express their appreciation to Rose Chu, David McKusick, Alice Wade, and John Wilkin who contributed to the development of the methodology. We are also grateful to Paul Lichtenstein, Henry Tyson, Ronald Lambert, Ronald Deacon, and Sidney Trieger of HCFA who provided comments on various aspects of the research design; and to David Mahr and Cristina Miyar who supported production activities.

Introduction

The Arizona Health Care Cost Containment System (AHCCCS) is an innovative Medicaid program that provides services to eligible indigent persons in Arizona. The only state without a traditional Medicaid program, Arizona receives federal funding for AHCCCS as a HCFA demonstration project.¹

AHCCCS has similar eligibility and service coverage as traditional Medicaid programs but contracts on a capitated basis with health care plans to provide medical care services. The program, begun in October 1982, originally provided acute care services to the noninstitutionalized population. In 1989, long-term care beneficiaries were integrated into the program through the establishment of ALTCS, the Arizona Long-Term Care System. AHCCCS and ALTCS remain administratively separate. This paper focuses on a cost analysis of AHCCCS exclusive of the ALTCS program.

The uniqueness of the AHCCCS concept lies in the financial incentives faced by the organizations responsible for delivering care to the program eligibles. Unlike traditional Medicaid programs that rely primarily on fee-for-service as a means of paying providers, AHCCCS capitates health care plans for the delivery of covered services to its beneficiaries. Health care plans, in turn, arrange for the delivery of services from physicians, hospitals and other providers using a variety of payment methods. These methods include fee-for-service (with or without risk sharing), capitation, and salary. The plan capitation rates are set through a competitive bidding process.

Qualified organizations such as health maintenance organizations (HMOs) and independent practice associations (IPAs) submit bids to the state for the provision of medical services in response to a Request for Proposal (RFP). The RFP specifies the type of services to be provided, the groups eligible, and the conditions under which an organization must operate if it wishes to serve as an AHCCCS health plan. The bids submitted include the capitation rates that the organization is willing to accept from the state in exchange for providing care. Rates are submitted separately by county and category of

eligibility. The state evaluates the bids, negotiates the capitation payment amounts, and offers contracts to the winning organizations.²

Under the AHCCCS program, each beneficiary chooses or is assigned to a primary care physician for care management and is required to pay small copayments for some services. The original legislation required that most of the program's administrative functions be contracted to a private administrator but the state assumed this function early in the program (in March 1984).³ Until October 1991, the state was capitated by the federal government and was at risk for any excess of expenditures over the capitation payments. Currently the state receives reimbursement from the federal government on a cost basis identical to traditional Medicaid program reimbursement.⁴

Because of the Health Care Financing Administration's (HCFA's) interest in this innovative program, they have funded two evaluation efforts.⁵ These evaluations have included studies of program implementation issues (administration, method of setting capitation payments, eligibility, level of care determination, quality assurance, plan effectiveness, administrative costs, and management information systems) and of program outcomes (cost, utilization, access and satisfaction, and quality of care).⁶

The findings reported in this paper are summarized from six detailed reports to HCFA as part of these funded evaluations.⁷ These reports compare the AHCCCS program cost with that of a traditional program. This paper is divided into three parts. In the first part, the methodology to calculate the cost of the AHCCCS program and to estimate the cost of a traditional Medicaid program in the state of Arizona is described. The second part presents the results of the analysis of costs for FY 83 - FY 91. The paper concludes with a discussion of the policy implications of the analysis.

Methodology

The Omnibus Budget Reconciliation Act (OBRA) of 1981 made it possible

for states to waive some Medicaid statutory requirements such as freedom of choice of provider in efforts to design more cost effective approaches to providing Medicaid services. Several states have designed such programs and analyzed the cost savings. Some of these analyses have been conducted both as part of the waiver application process and some as part of independent research efforts.

In their review of 25 managed care program evaluations, Hurley, Freund and Paul found calculated cost savings in the 5-15 percent range.⁸ The most rigorous cost analyses done to date have calculated cost savings by comparing predemonstration use to demonstration use and then converting those differences in use to dollars, or by comparing capitation payments in the experimental sites with corresponding actual expenditures for fee-for-service comparison groups.⁹ Many of the 25 analyses reported on were from data presented in waiver applications; many included only information for the first year of the program; most relied on aggregate data reports or estimates of expenditures rather than per-person data; and few considered administrative costs.¹⁰ The analysis reported on below covers the first nine years of the AHCCCS program, presents a per-person approach to calculating program and comparison group costs and includes administrative costs.

The specific methodology employed in this analysis examines the actual cost (medical service plus administrative) of the AHCCCS program as compared to an estimate of what the cost would have been if Arizona had adopted a traditional Medicaid program. To accurately estimate what a traditional Medicaid program would have cost in Arizona, the costs in other states that provide a similar set of services to a similar population group are examined.

States have a considerable amount of discretion in setting eligibility criteria for their Medicaid programs and thus, the income and health status characteristics of the eligible populations can vary significantly from state to state. Therefore, the comparison group is restricted to those eligibility groups for which the states receive federal matching dollars and which have been in existence since FY 83 (i.e., the AFDC and SSI eligibles).

Omitted from the analysis are medically indigent and medically needy (MI/MN) individuals receiving federal matching funds and state-supported eligibility groups. Arizona does not have a federal MI/MN population and state-only groups' eligibility criteria vary substantially from state to state. Native Americans on reservations are also omitted. Also excluded from this analysis are women and children who became eligible after the passage of the Sixth Omnibus Budget Reconciliation Act (SOBRA). The SOBRA program was added to the Medicaid program in 1988 and thus represents a group for which data on costs do not exist before 1988. The AFDC and SSI eligibles included in this analysis account for two-fifths of total AHCCCS eligibles in FY 91.

The costs examined include both medical service costs and administrative costs. Because of the unique features of the AHCCCS program, it is possible that administrative costs might differ significantly from those of traditional Medicaid programs. To develop an accurate assessment of cost savings, it is therefore important to examine all the costs associated with service provision. The method used to aggregate the cost of the AHCCCS program and to estimate what a traditional Medicaid program would have cost in Arizona is described below.

Cost of the AHCCCS Program

AHCCCS divides its medical service program expenditures into six categories: capitation payments, fee-for-service claims, reinsurance claims, deferred liability, Part B premiums, and third-party collections. Table 1 presents the expenditures for each of these categories for FY 91. Total medical service expenditures for AFDC and SSI beneficiaries in FY 91 were \$304.2 million.

Capitation payments represent the overwhelming majority of AHCCCS program costs, accounting for over 90 percent of the total in FY 91. These payments represent the amount paid to the participating health care plans to provide services to the beneficiaries on a prepaid capitation basis.

Table 1

AHCCCS MEDICAL PROGRAM EXPENDITURES IN
1991 FOR AFDC AND SSI BENEFICIARIES
(in thousands)

	<u>Total</u>
Capitation Payments	\$277,115
Fee-For-Service Claims	13,033
Reinsurance Claims	5,831
Deferred Liability	4,175
Part B Premiums	4,728
Third-Party Collections	(635)
Total Expenditures	304,247

Fee-for-service claims totaled \$13.0 million dollars in FY 91 and accounted for four percent of program costs. Fee-for-service payments are made directly to health care providers (such as doctors and hospitals) to cover the cost of services rendered to eligibles who are not enrolled in a prepaid health plan. These individuals include those newly eligible for the program and residents of areas where AHCCCS does not have a capitated provider.

The third category of expenditures is reinsurance. To protect the health plans against individual catastrophic expenses, the program provides reinsurance for claims that exceed a per-person deductible during a 12-month fiscal year period. In FY 91, the deductible ranged from \$10,000 to \$30,000, depending on the size of the health plan. Once the deductible is met, the state pays 80 percent of the allowable costs in excess of the deductible and the plan is responsible for the remaining 20 percent. In FY 91, reinsurance payments totalled \$5.8 million and represented almost two percent of total AHCCCS program costs.

Deferred liability payments are the fourth category of AHCCCS expenditures. In some instances, plans receive payment from the state for care rendered to newly enrolled members who meet special conditions such as being hospitalized at the time of enrollment in the plan, receiving active chemotherapy or radiation therapy for malignant or metastatic diseases, or being in the last two weeks of a high-risk pregnancy. In these instances a plan's financial liability for the new enrollee is "deferred" and the state pays for the services. In FY 91, deferred liability payments were \$4.2 million and accounted for one percent of total program costs.

The fifth category of AHCCCS costs is Medicare Part B premiums. AHCCCS eligibles who are also eligible for Medicare are "bought into" Part B of the Medicare program. Arizona pays the Medicare Part B premium on behalf of these individuals to enroll them into Medicare's Supplementary Medical Insurance Program which covers ambulatory care. For these individuals, Medicare becomes the first payer. Plan financial liability is thus limited to the Medicare copayment and deductibles on Part B services, as well as any services that are

not covered under Part B of the Medicare program but that are covered under AHCCCS. In FY 91, the Part B premiums paid by AHCCCS were \$4.7 million and accounted for two percent of total program costs.

An offset to program expenditures are third-party collections. AHCCCS collects revenue from third-party payers such as workers' compensation, auto insurance companies, and private insurance. In FY 91 the amounts recovered from third-parties totalled \$635 thousand.

In addition to medical service costs, there are significant administrative costs associated with running a program such as AHCCCS. Designing the RFPs and evaluating bid responses, overseeing the quality of care delivered, and monitoring the financial integrity of the plans require considerable resources. These needs include the capacity for data collection and analysis. As a consequence, it is important when conducting an analysis of the cost savings to consider not only direct service costs but also program administrative costs.

Unfortunately, it is not possible to separate out the administrative costs associated with the specific AHCCCS population groups being studied (i.e., AFDC and SSI) from the administrative costs of the other eligibility groups. Therefore, the analysis assumes that administrative costs are equal across eligibility groups.

To calculate the administrative costs for the population eligible for federal matching dollars, overall AHCCCS administrative costs as a percent of medical service costs are calculated. In FY 91 this was 11.6 percent. This 11.6 percent is then multiplied by the medical service costs associated with providing care to those eligible for federal matching dollars. Total administrative costs are thus estimated for this population group at \$35.3 million.

Cost of a Traditional Medicaid Program

To estimate the cost of a traditional Medicaid program in Arizona, cost data from other state Medicaid programs with similar eligibility criteria to AHCCCS that had reliable cost reporting systems are used. Because the cost per Medicaid eligible varies considerably from state to state, data from as many other states as possible are used to develop the cost estimates.

A comparison cost was developed separately for each category of eligibility (i.e., AFDC, SSI Aged, SSI Disabled, SSI Blind). This was important because there are clear differences in health status, need for services, and the resulting cost of care between different categories of eligibility. HCFA requires that each state report costs separately for the AFDC population and for each of the three SSI program eligibility groups (Aged, Blind, and Disabled). Data, therefore, are available for both AHCCCS and for other state Medicaid programs to develop separate estimates of the cost per eligible for each of the four eligibility categories. The data used are from the HCFA-64 and HCFA-2082 reports.

The HCFA-64 report contains audited financial data on program outlays by type of service. The HCFA-2082 report contains unaudited detailed data on dollars spent, recipients, eligibles, and service utilization by maintenance assistance status and by basis of eligibility.

Figure 1 summarizes the criteria employed to select the comparison states and the adjustments made to the state data by category of eligibility to make it comparable to Arizona. Comparison states differed by eligibility group and year. The first criterion employed was that the state possess a well-functioning Medicaid Management Information System that had been in place for at least two years prior to the start-up of the AHCCCS program. Data from such systems are likely more reliable. This is of particular importance because the analysis used data from the unaudited HCFA-2082s.

The second criterion for selecting the states to be used in developing estimates of traditional Medicaid program costs was that they be similar to

Figure 1

CRITERIA FOR SELECTION OF COMPARISON STATES AND ADJUSTMENTS
MADE TO COMPARISON DATA BY CATEGORY OF ELIGIBILITY

	AFDC	SSI		
		Aged	Blind	Disabled
Criteria	Has an approved Medicaid Management Information System	Has an approved Medicaid Management Information System	Has an approved Medicaid Management Information System	Has an approved Medicaid Management Information System
	Does not cover families with unemployed parents	Uses federal determination of SSI eligibility	Uses federal determination of SSI eligibility	Uses federal determination of SSI eligibility
Adjustments	Geographic	Geographic	Geographic	Geographic
	Cost to incurred basis	Cost to incurred basis	Cost to incurred basis	Cost to incurred basis
	1.5 σ truncation	Crossover 1.5 σ truncation	Crossover 1.5 σ truncation	Crossover 1.5 σ truncation

Arizona in terms of eligibility criteria. The AFDC population eligible for AHCCCS did not include families with unemployed parents. In selecting the comparison states, those states that did provide coverage for these individuals were eliminated. With respect to developing comparison state estimates for the SSI Aged, Blind, and Disabled, states were selected that had eligibility criteria similar to AHCCCS. When SSI was enacted in 1972, states had two options in setting eligibility criteria. They could extend eligibility to all those eligible for federal SSI payments or they could use a more restrictive standard. If they covered all SSI eligibles, they could have the federal government do the eligibility determination. Otherwise the states do it themselves. Because Arizona covers all SSI eligibles and uses federal eligibility determination standards, the comparison states were restricted to ones that had similar features.

After selecting a set of comparison states for each eligibility category, the per-capita medical service cost in each state was calculated. The per-capita costs were then adjusted for geographic variations in medical services. The adjustment accounted for differences between Arizona and other states in the price and utilization of services and in the rural/urban distribution of eligibles.

The second adjustment made to the state data was to adjust for differences between cash and accrual accounting methodology used in reporting. AHCCCS expenditure data were available on an incurred basis. In order to develop incurred-basis estimates of the cost of a traditional Medicaid program, it was necessary to convert the cash-based numbers on the federal reporting forms to an incurred basis. An adjustment factor for each category of eligibility was developed by multiplying the average lag time between service date and payment date for that eligibility category by the rate of program growth for that eligibility category.

A third adjustment was made to the per person-month costs of care for SSI eligibles. This is an adjustment for "dual eligibility." Dual eligibles are those individuals who are eligible for both Medicare and Medicaid. The larger the percentage of the SSI population that are dual eligibles, the

smaller the Medicaid cost per eligible. This is because Medicare pays for some services that Medicaid would pay for if the beneficiary was not dually eligible. For services covered by Medicare, Medicaid pays for the Medicare deductible and coinsurance, as well as any part of the bill after Medicare coverage limits have been reached.

A mean cost per month was calculated for providing Medicaid services to each eligibility category by summing the cost per month over each of the comparison states and dividing by the number of comparison states. To reduce the impact of outliers on the estimate of traditional Medicaid program costs in Arizona, per-capita costs in states that reported per-capita costs that were more than 1.5 standard deviations from the mean were truncated to the value 1.5 standard deviations from the mean. Truncation was performed both for differences larger and smaller than the mean. The resulting figures provided estimates of what the medical service costs would have been for a traditional Medicaid program in Arizona.

The final calculation that needed to be made was to estimate the administrative costs associated with a traditional Medicaid program. Data on Medicaid administrative costs were obtained for each of the states that had a certified Medicaid Management Information System. Administrative costs were not broken out separately by category of eligibility or by whether the beneficiary is in long-term care. It was assumed that the percentage was consistent across eligibility groups and long-term care utilization status. Thus, the medical service and administrative costs were summed across the comparison states and the total administrative costs were divided by the total medical services costs.

Results

Table 2 presents the medical service cost per person-month by eligibility category for the AHCCCS program for FY 83 through FY 91. Table 3 shows the estimated medical service costs per person-month for a traditional Medicaid program in Arizona for FY 83 through FY 91. In FY 83, medical

Table 2

AHCCCS PERSON-MONTH MEDICAL CARE EXPENDITURES BY
CATEGORY OF ELIGIBILITY AND YEAR, FY 83 - FY 91

	<u>AFDC</u>	<u>Aged</u>	<u>SSI</u> <u>Blind</u>	<u>Disabled</u>	<u>All Categories</u>
FY 83	\$62.01	\$66.70	\$148.79	\$153.10	\$80.77
FY 84	57.84	69.90	153.43	163.64	80.31
FY 85	61.16	72.25	155.86	158.76	83.84
FY 86	63.76	92.38	170.50	182.72	93.63
FY 87	63.95	122.77	188.00	208.49	99.39
FY 88	73.93	134.14	199.15	215.72	107.01
FY 89	78.03	149.26	206.21	226.97	108.38
FY 90	100.68	156.80	219.69	244.30	125.11
FY 91	113.20	176.65	240.77	257.73	136.68

Table 3

ESTIMATED PERSON-MONTH MEDICAL CARE EXPENDITURES OF A
TRADITIONAL MEDICAID PROGRAM IN ARIZONA BY
CATEGORY OF ELIGIBILITY, FY 83 - FY 91

	<u>AFDC</u>	<u>SSI</u>			<u>All Categories</u>
		<u>Aged</u>	<u>Blind</u>	<u>Disabled</u>	
FY 83	\$58.54	\$68.16	\$147.25*	\$155.69	\$78.96
FY 84	60.22	76.05	147.25*	167.11	83.22
FY 85	68.90	85.87	147.25*	173.65	93.61
FY 86	70.33	99.28	161.09*	185.75	99.34
FY 87	77.95	113.29	161.09*	208.33	108.43
FY 88	81.34	133.64	145.12	239.50	116.88
FY 89	92.77	145.38	162.32	270.75	126.89
FY 90	106.18	170.45	197.67	306.81	139.38
FY 91	126.56	214.04	241.04	393.92	168.44

* Because the group is so small estimates of traditional program costs for the SSI blind in these years were not made. The numbers used for the comparison are the rates agreed to by Arizona and HCFA in determining HCFA financial participation.

service costs per person-month under AHCCCS ranged from \$62.01 for an AFDC beneficiary to \$153.10 for an SSI Disabled beneficiary. Under a traditional Medicaid program in FY 83, estimated costs per person-month ranged from \$58.54 for an AFDC beneficiary to \$155.69 for an SSI Disabled beneficiary. In FY 83, the actual average AHCCCS monthly cost for an SSI Disabled beneficiary was smaller than the estimate for an SSI Disabled beneficiary in a traditional Medicaid program. However, for an AFDC beneficiary, the actual monthly average cost was larger than the estimate for an AFDC beneficiary in a traditional Medicaid program in Arizona. By FY 91, the costs per person-month had risen to \$113.20 for an AFDC beneficiary under AHCCCS and to \$257.73 for an SSI Disabled beneficiary. The corresponding estimates for a traditional Medicaid program in Arizona were \$126.56 and \$393.92.

The final column in Tables 2 and 3 shows the average cost per person-month across all eligibility categories for AHCCCS and the estimate for a traditional Medicaid program in Arizona. With the exception of FY 83, AHCCCS medical service costs were always smaller than the estimate of a traditional Medicaid program in Arizona.

Although medical service costs were larger in the traditional program estimate, these larger costs could have been offset by smaller administrative costs. A managed care program like AHCCCS must allocate resources to management oversight activities, which may not be incurred under a traditional Medicaid program. Indeed, the results in Tables 4 and 5 support this.

Table 4 presents AHCCCS administrative costs as a percentage of medical service costs for FY 83 through FY 91. Table 5 presents the same information for the comparison states. AHCCCS administrative costs ranged from a low of 5.8 percent of medical service costs in FY 84 to a high of 12.1 percent in FY 88. By contrast, administrative costs for a traditional Medicaid program ranged from 4.3 percent of medical service costs in FY 91 to 5.1 percent in FY 83 through FY 88. Thus, while medical service costs were smaller under AHCCCS than they are estimated to have been in a traditional Medicaid program, these cost savings were achieved in part at the expense of larger administrative costs.

Table 4

AHCCCS ADMINISTRATIVE EXPENDITURES AS A
PERCENTAGE OF MEDICAL SERVICE
EXPENDITURES, FY 83 - FY 91

	<u>Percentage</u>
FY 83	7.4
FY 84	5.8
FY 85	7.0
FY 86	11.5
FY 87	12.0
FY 88	12.1
FY 89	11.9
FY 90	10.1
FY 91	11.6

Table 5

MEDICAID ADMINISTRATIVE EXPENDITURES FOR COMPARISON
STATES* AS A PERCENTAGE OF MEDICAL CARE
EXPENDITURES, FY 83 - FY 91

	<u>Percentage</u>
FY 83	5.1
FY 84	5.1
FY 85	5.1
FY 86	5.1
FY 87	5.1
FY 88	5.1
FY 89	4.6
FY 90	4.9
FY 91	4.3

* Comparison states for each year include all the states used in that year for any of the category of eligibility comparisons.

Table 6 presents the estimated medical service cost savings under AHCCCS, the excess of actual AHCCCS administrative cost over the estimated Arizona traditional program administrative cost, and the net AHCCCS program cost savings. Only in FY 83 were the overall estimated cost of a traditional Medicaid program smaller than the cost incurred under AHCCCS.

In FY 83, AHCCCS cost \$3.7 million more than a traditional program. However, as the program matured, it began to show substantial cost advantages over a traditional Medicaid program. This occurred despite the increase in actual AHCCCS administrative costs as a percentage of actual medical service costs and a decrease in the comparison states' administrative costs as a percentage of medical service costs. In fact, the biggest cost savings registered was in the most recent year, FY 91. AHCCCS posted a \$51.5 million saving over the estimate for a traditional Medicaid program. This occurred at the same time that AHCCCS administrative costs were estimated to be \$19.2 million greater than would have been experienced in a traditional Medicaid program in Arizona. Thus, it appears that the proportionately larger fraction of resources allocated to administration are in fact resulting in significantly smaller medical service costs and a continuing increase in the level of overall cost savings.

Table 7 presents the data on program costs savings by category of eligibility. In FY 83, AHCCCS program costs were larger than the estimates of a traditional Medicaid program in Arizona for every category of eligibility except the SSI Aged. Even for the SSI Aged, AHCCCS did not show any cost advantage over the estimate of a traditional Medicaid program. As time progressed, substantial cost savings began to emerge. For every year after the initial year, AHCCCS costs were smaller than the estimates of a traditional Medicaid program. However, this pattern of costs savings was not reflected in every eligibility category. Only among AFDC eligibles did the pattern of cost savings mirror the overall pattern. Cost savings for the SSI Aged, while positive overall, were negative in FY 87 - FY 89. In FY 86 and FY 87, as well as in the first program year, AHCCCS program costs for the SSI Disabled were larger than the estimate of traditional Medicaid program costs.

Table 6

AHCCCS SAVINGS, FY 83 - FY 91
(in thousands)

	<u>Medical Care Savings</u>	<u>Administrative Excess*</u>	<u>Net Savings</u>
FY 83	(\$1,768)	(\$1,910)	(\$3,678)
FY 84	3,185	(452)	2,733
FY 85	10,679	(1,197)	9,482
FY 86	6,535	(6,530)	4
FY 87	11,807	(8,354)	3,453
FY 88	14,424	(10,217)	4,207
FY 89	30,820	(11,753)	19,067
FY 90	27,036	(10,996)	16,040
FY 91	70,690	(19,170)	51,520
Total Savings	\$173,408	(\$70,579)	\$102,828

Note: Numbers may not add due to rounding.

* Administrative excess equals actual AHCCCS administrative costs minus (average Medicaid program administrative cost percentage times actual AHCCCS medical care cost).

Table 7

AHCCCS SAVINGS BY CATEGORY OF ELIGIBILITY
AND YEAR, FY 83 - FY 91
(in thousands)

	<u>AFDC</u>	<u>Aged</u>	<u>SSI</u>		<u>All</u>
			<u>Blind</u>	<u>Disabled</u>	<u>Categories</u>
FY 83	(3,497)	0	(28)	(153)	(3,678)
FY 84	1,606	638	(47)	536	2,733
FY 85	5,156	1,454	(86)	2,958	9,482
FY 86	2,210	133	(145)	(2,193)	4
FY 87	9,546	(1,817)	(287)	(3,989)	3,453
FY 88	2,782	(989)	(483)	2,897	4,207
FY 89	12,404	(1,407)	(375)	8,445	19,067
FY 90	804	577	(194)	14,852	16,040
FY 91	10,248	2,623	(101)	38,750	51,520
Total Savings	41,259	1,212	(1,746)	62,103	102,828

Note: Numbers may not add due to rounding.

It is not clear why the cost savings for the different eligibility categories experienced year-to-year variation. One possible explanation is that it is, to some extent, an artifact of the bid cycles. When AHCCCS awarded multiple-year contracts to the plans, it often specified that the bid rates for the years after the first contract year would be increased at a rate that was tied to the medical care price index or some other index of inflation. As a result, AHCCCS payments to the plans were increased by the same percentage by eligibility category, regardless of the cost experience of the plans for the various eligibility categories. This is likely to have some effect on the pattern of cost savings.

One of the most significant aspects of Table 7 is that there is a general pattern of increased cost savings or reduced level of loss over time for each eligibility category. This is particularly true for the AFDC population and the SSI Disabled population. The total cumulative savings over the first nine years of the program calculated in actual dollars was \$102.8 million. Of this, \$62.1 million in savings was generated by the SSI Disabled and \$41.3 million was generated by the AFDC eligibles. Long-term cost savings were negligible for the SSI Aged eligibles and negative for the SSI Blind eligibles.

The key to long-term cost savings is not only to generate year-to-year savings in costs, but to hold down the rate of increase in program costs over time. If AHCCCS can successfully maintain a rate of cost increase that is smaller than that of a traditional Medicaid program, then the absolute level of cost savings will rise over time. Table 8 shows that for the SSI Aged, SSI Disabled, and AFDC populations the rate of increase in AHCCCS costs have been below the rate of increase in the estimates of traditional Medicaid program costs. Over the nine years, the average annual per-capita growth rate was 6.8 percent for AHCCCS and 9.9 percent for the estimate of a traditional program. Overall, AHCCCS experienced a 69.2 percent increase in monthly per-capita medical service costs over the first nine years of the program, compared to an estimated 113.3 percent increase in these costs under a traditional Medicaid program. These results are of substantial importance because they seem to indicate that savings are accelerating over time.

Table 8

AHCCCS PROGRAM MEDICAL CARE EXPENDITURE INCREASES COMPARED WITH INCREASES
IN ESTIMATES OF A TRADITIONAL MEDICAID PROGRAM EXPENDITURES
ARIZONA BY CATEGORY OF ELIGIBILITY, FY 83 - FY 91

	<u>AHCCCS</u>		<u>Traditional Program</u>	
	<u>Total</u>	<u>Average</u>	<u>Total</u>	<u>Average</u>
AFDC	82.6	7.8	116.2	10.1
SSI				
Aged	164.8	12.9	214.5	15.4
Blind	61.8	6.2	N/A	N/A
Disabled	68.1	6.7	152.9	12.3
Both AFDC and SSI	69.2	6.8	113.3	9.9

N/A = Not Available

Discussion

The results of the cost analysis indicate that the AHCCCS program has yielded significant cost savings over estimates of a traditional Medicaid program. Between FY 83 and FY 91 cumulative savings from the AHCCCS program totaled over \$100 million. The savings were largest for the AFDC and SSI Disabled populations.

In addition to large cumulative cost savings, the analysis indicates that the rate of expenditure increase in AHCCCS has been considerably smaller than the rate of expenditure increase experienced by traditional Medicaid programs. As a result, cost savings from the AHCCCS program have been increasing over time. In FY 83, the first year of AHCCCS, the program was estimated to cost \$3.7 million more than a traditional Medicaid program would cost. However, by FY 91 AHCCCS program costs were \$51 million smaller than estimated traditional Medicaid program costs.

Policymakers need to be aware of the fact that major structural reforms in programs such as Medicaid may not result in immediate cost savings. Programs involving major reforms may have high start-up costs associated with developing appropriate infrastructure (i.e., management information systems, provider networks and bidding processes). Once this infrastructure is in place, program cost savings can then begin to emerge.

Another lesson is that, while there are overall program cost savings associated with AHCCCS, the administrative costs are larger than those associated with a traditional Medicaid program. Indeed, AHCCCS administrative costs as a percent of medical service costs are about double those of a traditional Medicaid program. This may indicate that to be effective in achieving program savings, managed care programs need to develop strong administrative structures that allocate substantial resources to providing adequate oversight and managing program resources.

The study results do have an important number of limitations. First, the assessment of cost savings is based on a comparison of AHCCCS with other

state Medicaid programs. Because Arizona never had a traditional Medicaid program prior to AHCCCS, it is not known what the program would have cost had Arizona actually implemented a traditional Medicaid program in place of AHCCCS.

A second limitation of the study is the restriction of the study population to acute care beneficiaries. This paper excludes the ALTCS population, although that analysis is currently in process.¹¹

Another limitation is that the analysis was conducted only for AFDC and SSI eligibles. It did not include the medically indigent/medically needy, or SOBRA women and children. This was done so that similar populations across states and over time could be compared. Nevertheless, an analysis including these other Medicaid eligibility groups could result in different findings.

A final limitation is the estimation required in the calculation of administration costs. Although AHCCCS separates its administrative costs associated with serving acute care beneficiaries from those associated with the long-term care beneficiaries, other state Medicaid programs do not do this. Nor do AHCCCS or traditional programs separate out administrative costs by category of eligibility. The analysis assumed that as a percentage of medical service costs, administrative costs were identical for all eligibility categories and all types of beneficiaries, but this assumption may not be accurate.

Notwithstanding these important limitations, it does appear that a restructuring of traditional Medicaid programs along the lines of AHCCCS does hold significant promise for controlling the rapidly rising costs of the program. Not only do program costs appear to be smaller under AHCCCS, but the rate of increase in costs also appears to be smaller, leading to increasing cost savings over time.

REFERENCES

1. Nelda McCall, Jodi Korb and Ellen Jones Bauer, Evaluation of Arizona's Health Care Cost Containment System Demonstration: Draft Third Outcome Report (San Francisco, California: Laguna Research Associates, October 1993).
2. Lynn Paringer and Nelda McCall, "How Competitive is Competitive Bidding?" Health Affairs, Vol. 10, No. 4, Winter 1991.
3. Nelda McCall, Lynn Paringer, Michael Crane, C. William Wrightson, Pamela Turner, Ellen Jones Bauer and James Boisimer, Evaluation of the Arizona Health Care Cost Containment System: Final Report (Menlo Park, California: SRI International, January 1989).
4. C. William Wrightson, John Wilkin and Gordon Trapnell, "Cost", Chapter 2 in: Nelda McCall, Pamela Turner, C. William Wrightson, John Wilkin, Gordon Trapnell, Donald Balaban, Margaret Watkins, Lynn Paringer, Ellen Jones Bauer, Sande Kiriluk, Betty Skipper and Neill Piland, Evaluation of the Arizona Health Care Cost Containment System Demonstration: First Outcome Report (San Francisco, California: Laguna Research Associates, July 1991).

C. William Wrightson, John Wilkin and Alice Wade, "Cost," Chapter 2 in: Nelda McCall, Jodi Korb, Lynn Paringer, Donald Balaban, C. William Wrightson, John Wilkin, Alice Wade and Margaret Watkins, Evaluation of the Arizona Health Care Cost Containment System Demonstration: Second Outcome Report (San Francisco, California: Laguna Research Associates, April 1993).
5. Evaluation of the Arizona Health Care Cost Containment System (AHCCCS), 6/83-1/89, HCFA Contract Number: 500-83-0027 and Evaluation of the Arizona Health Care Cost Containment System Demonstration, 10/89-9/94, HCFA Contract Number: 500-89-0067.
6. Nelda McCall, E. Deborah Jay and Richard West, "Access and Satisfaction in the Arizona Health Care Cost Containment System," Health Care Financing Review, Vol. 11, No. 1, Fall 1989.

Donald Balaban, Nelda McCall and Ellen Jones Bauer, "Quality of Medicaid Managed Care: An Evaluation of The Arizona Health Care Cost Containment System (AHCCCS)," submitted for publication.
7. Gordon Trapnell, David McKusick, C. William Wrightson, Lynn Paringer, Rose Chu and Nelda McCall, Comparison of AHCCCS Program Cost with that of a Traditional Medicaid Program for Fiscal Year 1983 and Fiscal Year 1984 (Menlo Park, California: SRI International, 1986).

Gordon Trapnell, David McKusick, C. William Wrightson, Rose Chu and Nelda McCall, Comparison of AHCCCS Program Cost with that of a Traditional Medicaid Program for Fiscal Year 1985 (Menlo Park,

California: SRI International, 1987).

Gordon Trapnell, David McKusick, C. William Wrightson, Rose Chu and Nelda McCall, Comparison of AHCCCS Program Cost with that of a Traditional Medicaid Program for Fiscal Year 1986 and Fiscal Year 1987 (Menlo Park, California: SRI International, January 1989).

Nelda McCall, Lynn Paringer, Michael Crane, C. William Wrightson, Pamela Turner, Ellen Jones Bauer and James Boisimer, Evaluation of the Arizona Health Care Cost Containment System: Final Report (Menlo Park, California: SRI International, January 1989).

C. William Wrightson, John Wilkin and Gordon Trapnell, "Cost," Chapter 2 in: Nelda McCall, Pamela Turner, C. William Wrightson, John Wilkin, Gordon Trapnell, Donald Balaban, Margaret Watkins, Lynn Paringer, Ellen Jones Bauer, Sande Kiriluk, Betty Skipper and Neill Piland, Evaluation of the Arizona Health Care Cost Containment System Demonstration: First Outcome Report (San Francisco, California: Laguna Research Associates, July 1991).

C. William Wrightson, John Wilkin and Alice Wade, "Cost," Chapter 2 in: Nelda McCall, Jodi Korb, Lynn Paringer, Donald Balaban, C. William Wrightson, John Wilkin, Alice Wade and Margaret Watkins, Evaluation of the Arizona Health Care Cost Containment System Demonstration: Second Outcome Report (San Francisco, California: Laguna Research Associates, April 1993).

8. Robert Hurley, Deborah Freund and John Paul, Managed Care in Medicaid: Lessons for Policy and Program Design, (Ann Arbor, Michigan: Health Administration Press, 1993).
9. Deborah Freund, Louis Rossiter, and Robert Hurley, Nationwide Evaluation of Medicaid Competition Demonstrations: Volume 3 - Utilization and Cost Analyses, (Research Triangle Park, North Carolina: Research Triangle Institute, 1988).
10. Robert Hurley, Deborah Freund and John Paul, Managed Care in Medicaid: Lessons for Policy and Program Design, (Ann Arbor, Michigan: Health Administration Press, 1993).
11. John Wilkin and Alice Wade, in the forthcoming Evaluation of the Arizona Health Care Cost Containment System: Fourth Implementation and Operation Report, scheduled for publication in Summer of 1994.

PUBLICATIONS ON THE ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM
AND THE ARIZONA LONG-TERM CARE SYSTEM --

Nelda McCall, C. William Wrightson, Lynn Paringer, Gordon Trapnell, "Medicaid Managed Care Savings: The Arizona Experience," forthcoming in Health Affairs, Volume 13:1 (Spring 1994).

Nelda McCall, Jodi Korb, Ellen Jones Bauer, Evaluation of Arizona's Health Care Cost Containment System Demonstration - Third Outcome Report, January 1994.

Nelda McCall, Jodi Korb, Michael Crane, William Weissert, C. William Wrightson, Evaluation of Arizona's Health Care Cost Containment System Demonstration - Third Implementation and Operation Report, October 1993.

Nelda McCall, Jodi Korb, Lynn Paringer, Donald Balaban, C. William Wrightson, John Wilkin, Alice Wade, Margaret Watkins, Evaluation of Arizona's Health Care Cost Containment System Demonstration - Second Outcome Report, April 1993.

Nelda McCall, Michael Crane, Ellen Jones Bauer, William Weissert, Lynn Paringer, William Wrightson, Evaluation of Arizona's Health Care Cost Containment System Demonstration - Second Implementation and Operation Report, April 1992.

Lynn Paringer and Nelda McCall, "How Competitive is Competitive Bidding?" Evidence from the Arizona Health Care Cost Containment System," Health Affairs, Volume 10:4 (Winter 1991).

Nelda McCall, Pamela Turner, C. William Wrightson, John Wilkin, Gordon Trapnell, Donald Balaban, Margaret Watkins, Lynn Paringer, Ellen Jones Bauer, Sande Kiriluk, Betty Skipper, Neill Piland, Evaluation of the Arizona Health Care Cost Containment System Demonstration - First Outcome Report, July 1991.

Nelda McCall, Lynn Paringer, William Weissert, Pamela Turner, Michael Crane, William Wrightson, Ellen Jones Bauer, Evaluation of the Arizona Health Care Cost Containment System - First Implementation and Operation Report, February 1991. NTIS #PB92-145671/AS.

Nelda McCall, Deborah Jay, and Richard West, "Access to and Satisfaction with Medical Care in the Arizona Health Care Cost Containment System," Health Care Financing Review, Fall 1989.

Nelda McCall, Lynn Paringer, Michael Crane, C. William Wrightson, Howard Marantz, Evaluation of the Arizona Health Care Cost Containment System - Fourth Implementation and Operation Report, January 1987 to December 1987, January 1989. NTIS #PB89-156729/AS.

Nelda McCall, Pamela Turner, Michael Crane, Howard Marantz, Evaluation of the Arizona Health Care Cost Containment System - Utilization of Medical Services in the Fourth and Fifth Program Years, January 1989. NTIS #PB89-156194/AS.

Donald Balaban, Ellen Jones Bauer, Richard West, Nelda McCall, Evaluation of the Arizona Health Care Cost Containment System - Quality of Care Report, January 1989. NTIS #PB89-156210/AS.

Margaret Watkins, Neill F. Piland, Evaluation of the Arizona Health Care Cost Containment System - Quality of Care Report Attachment, January 1989. NTIS #PB89-156236/AS.

Gordon Trapnell, David McKusick, C. William Wrightson, Rose Chu, Nelda McCall, Evaluation of the Arizona Health Care Cost Containment System - Comparison of Program Cost with That of a Traditional Medicaid Program for Fiscal Years 1986 and 1987, January 1989. NTIS #PB89-156202/AS.

Nelda McCall, Donald Balaban, Ellen Jones Bauer, Richard West, Evaluation of the Arizona Health Care Cost Containment System - Final Report, January 1989. NTIS #PB89-156228/AS.

Nelda McCall, "The Arizona Health Care Cost Containment System: Implementation of its Special Features by Plan Structure," Advances in Health Economics and Health Services Research, JAI Press, Volume 10, 1989.

Nelda McCall, Michael Crane, Susan Haber, Laurie Meier, Lynn Paringer, William Wrightson, Howard Marantz, Evaluation of the Arizona Health Care Cost Containment System - Third Implementation and Operation Report, October 1985 to December 1986, December 1987. NTIS #PB89-156178/AS.

Nelda McCall, Douglas Henton, Susan Haber, Lynn Paringer, Michael Crane, William Wrightson, and Deborah Freund, "Evaluation of the Arizona Health Care Cost Containment System," Health Care Financing Review, Winter 1987.

Gordon Trapnell, David McKusick, C. William Wrightson, Rose Chu, Nelda McCall, Evaluation of the Arizona Health Care Cost Containment System - Comparison of AHCCCS Program Cost to That of a Traditional Medicaid Program for Fiscal Year 1985, April 1987. NTIS #PB89-137970/AS.

Nelda McCall, Douglas Henton, Susan Haber, Lynn Paringer, Michael Crane, C. William Wrightson, Deborah Freund, Paul Sanazaro, Evaluation of the Arizona Health Care Cost Containment System - Second Implementation and Operation Report, April 1984 to September 1985, February 1987. NTIS #PB89-137962/AS.

Gordon Trapnell, David McKusick, C. William Wrightson, Lynn Paringer, Rose Chu, Nelda McCall, Evaluation of the Arizona Health Care Cost Containment System - Comparison of AHCCCS Program Cost with That of a Traditional Medicaid Program for Fiscal Years 1983 and 1984, April 1986. NTIS #PB89-134977/AS.

Nelda McCall, Douglas Henton, Michael Crane, Susan Haber, Deborah Freund, and William Wrightson, "Evaluation of the Arizona Health Care Cost Containment System," Health Care Financing Review, Winter 1985.

Nelda McCall, Douglas Henton, Michael Crane, Susan Haber, Deborah Freund, C. William Wrightson, First Implementation and Operation Report, October 1982 to March 1984, December 1984. NTIS #PB89-137962/AS.

CMS LIBRARY



3 8095 00014178 4